

CLAIMS

1. Accommodative intraocular lens for implantation in the capsular sac, comprising a central optical part and a peripheral haptic part, the optical part having a forward accommodation position and a rest position for far vision, characterized in that the haptic part (20, 40, 60) comprises a radial expansion zone (21, 21A, 21B, 21C, 21D, 21F, 41, 61) allowing displacement of the optical part (10, 30, 50) towards the forward position.
2. Intraocular lens, characterized in that the radial expansion zone (21, 21A, 21B, 21C, 21D, 21F, 41) comprises a bellows (22, 22A, 22B, 22C, 22D, 22F, 42).
3. Intraocular lens according to claim 1 or claim 2, characterized in that the radial expansion zone (21, 21A, 21B, 21C, 21D, 21F, 41) comprises at least one undulation (23, 24, 25, 43, 44).
4. Intraocular lens according to any one of claims 1 to 3, characterized in that the radial expansion zone (21, 21B, 41, 61) is substantially annular and extends circumferentially around the optical part.
5. Intraocular lens according to any one of claims 1 to 4, characterized in that the haptic part (20C, 20F) comprises two symmetrical and diametrically opposite haptic members (21C, 21F).
6. Intraocular lens according to claim 5, characterized in that each haptic member has a circumference at the periphery of the haptic part greater than the circumference at the junction with the optical part (10).
7. Intraocular lens according to claim 5 or claim 6, characterized in that the haptic part comprises at least three circumferentially spaced haptic members.
8. Intraocular lens according to any one of claims 5 to 7, characterized in that the gaps between the haptic members have the same circumference.

9. Intraocular lens according to any one of claims 3 to 8 characterized in that the depth of the undulation(s) (23, 24, 25, 43, 44) is significantly reduced or eliminated in the forward position.

5 10. Intraocular lens according to any one of claims 1 to 4 and 9, characterized in that it comprises a plurality of symmetrical radial notches (27A) open at the periphery of the haptic part (20) and in that the notches (27A) pass partly or totally through the annular 10 undulation(s).

15 11. Intraocular lens according to any one of claims 3 to 10, characterized in that there are at least two undulations of which one is open on the anterior side (23, 43) and the other or another is open on the posterior side (24, 44).

20 12. Intraocular lens according to claim 11, characterized in that the undulation (23, 43) open on the anterior side is formed at the periphery (11, 31) of the optical part (10, 30) and the undulation (24, 44) that is open on the posterior side extends around the undulation (23, 43) that is open on the anterior side.

25 13. Intraocular lens according to claim 12, characterized in that the undulation that is open on the anterior side is formed at the periphery of the optical part and the undulation that is open on the anterior side extends around the undulation that is open on the posterior side.

30 14. Intraocular lens according to claim 12 or claim 13, characterized in that the two undulations (23, 24, 43, 44) are substantially sinusoidal in radial section.

35 15. Intraocular lens according to any one of claims 12 to 14, characterized in that, in the rest state of the lens, the bottom of the undulation (23) that is open on the anterior side is situated rearwardly of the periphery of the optical part (10).

16. Intraocular lens according to any one of claims 12 to 14, characterized in that the bottom of the undulation that is open on the posterior side (44) is situated forwardly of the periphery of the optical part.

5 17. Intraocular lens according to any one of the preceding claims, characterized in that the radial expansion zone (21, 41, 61) extends from the periphery of the optical part (10, 30, 50).

10 18. Intraocular lens according to any one of claims 9 to 15, characterized in that each undulation (23, 24, 25, 43, 44) subtends an angle from 50° to 70°.

15 19. Intraocular lens according to any one of the preceding claims, characterized in that the haptic part (20, 40, 60) comprises a peripheral edge portion (26, 26C, 26D, 26F, 66) with anterior square corners (27, 27C, 27F, 67) and posterior square corners (28, 28C, 28F, 68).

20 20. Intraocular lens according to any one of claims 1 to 4 and 11 to 19, characterized in that the haptic part (20, 40, 60) is circumferentially continuous over the whole of its radial dimension.

25 21. Intraocular lens according to any preceding claim, characterized in that the radial expansion zone (61) is more flexible than the remainder of the haptic part (60).

22. Intraocular lens according to claim 21, characterized in that the radial expansion zone (61) comprises no undulations.

30 23. Intraocular lens according to any one of claims 18, 20 and 21, characterized in that the haptic part (40) comprises a peripheral gutter (46, 46B) whose maximum width in the axial direction is from 0.5 mm to 1.5 mm.

35 24. Intraocular lens according to claim 23, characterized in that the exterior surface of the peripheral gutter (46B) in its greatest diameter zone comprises protrusions or bosses (49B).

25. Intraocular lens according to claim 23 or claim 24, characterized in that the peripheral gutter (46) has a rounded external surface subtending an angle at the center from 90° to 180°.

5 26. Intraocular lens according to any one of claims 1 to 3, 9, 11 to 19, 21 and 22, characterized in that the haptic part (20) comprises a plurality of radial arms (20D) extending between the peripheral edge portion of the optical part (11D) and the peripheral edge portion of 10 the haptic part (26D) and forming closed contour gaps (29D) between them.